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#### Declarations under Rule 4.17:

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a patent (Rule 4.17(ii)) for the following designations AE,  
AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,  
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES,  
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(AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU,  
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(54) Title: QUINAZOLINES AS MMP-13 INHIBITORS

(57) Abstract: A compound selected from those of formula (I): in which: R<sub>1</sub> represents a group selected from hydrogen, amino, alkyl, alkenyl, aminoalkyl, aryl, arylalkyl, heterocycle, and cycloalkylalkyl, optionally substituted, W represents oxygen, sulphur, or =N-R', in which R' is as defined in the description, X<sub>1</sub>, X<sub>2</sub> and X<sub>3</sub> represent nitrogen or -C-R<sub>4</sub> in which R<sub>4</sub> is as defined in the description, Y represents oxygen, sulphur, -NH, or -N(C<sub>1</sub>-C<sub>6</sub>)alkyl, Z represents oxygen, sulphur, -NR<sub>7</sub> in which R<sub>7</sub> is as defined in the description, and optionally carbon atom, n is an integer from 1 to 8 inclusive, Z<sub>1</sub> represents -CR<sub>8</sub>R<sub>9</sub> wherein R<sub>8</sub> and R<sub>9</sub> are as defined in the description, A represents aromatic or non-aromatic, heterocyclic or non-heterocyclic ring system, m is an integer from 0 to 7 inclusive, the group(s) R<sub>2</sub> is (are) is as defined in the description, R<sub>3</sub> represents hydrogen, alkyl, alkenyl, alkynyl, or a group of formula: in which Z<sub>2</sub>, B, R<sub>3</sub>, P and q are as defined in the description, optionally, the racemic forms thereof, isomers thereof, N-oxydes thereof, and the pharmaceutically acceptable salts thereof, and medicinal products containing the same are useful as specific inhibitors of type-13 matrix metalloprotease.

## INTERNATIONAL SEARCH REPORT

In Application No  
PCT/EP 02/01979

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D239/96 C07D401/12 C07D405/12 C07D409/12 C07D405/14  
 C07D409/14 C07D471/04 C07D403/12 C07D403/10 C07D401/10  
 C07D413/10 C07D401/06 A61K31/5025 A61K31/505

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, BEILSTEIN Data, EPO-Internal, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| X          | LIVERTON N J ET AL: "Nonpeptide glycoprotein IIb/IIIa inhibitors: substituted quinazolinediones and quinazolinones as potent fibrinogen receptor antagonists"<br>BIOORGANIC & MEDICINAL CHEMISTRY LETTERS, OXFORD, GB,<br>vol. 8, no. 5, 3 March 1998 (1998-03-03),<br>pages 483-486, XP004136889<br>ISSN: 0960-894X<br>see compound 7 page 481 | 17,18                 |
| X          | H OGAWA ET AL: "Studies on positive inotropic agents V"<br>CHEM PHARM BULL,<br>vol. 36, no. 6, 1988, pages 2253-2258,<br>XP001080174<br>see compound X chart I  | 17,18                 |
| -/--       |   |                       |

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Scruton-Evans, I

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 Int'l Application No  
 PCT/EP 02/01979

 A. CLASSIFICATION OF SUBJECT MATTER  
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According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| P,X        | DATABASE CHEMCATS 'Online!<br>CHEMICAL ABSTRACTS SERVICE,<br>COLUMBUS, OHIO, US;<br>XP002201020<br>ORDER NO A1240/0056923<br>& "SCREENING COLLECTION"<br>28 March 2000 (2000-03-28), ZELINSKY<br>INSTITUTE OF ORGANIC CHEMISTRY, 47<br>LENINSKY PROSPECT, MOSCOW, 117913 RUSSIA<br>---<br>-/-- | 1                     |

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